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| 09/484,667      | 01/18/2000  | D. Amnon Silverstein | 10982103-1          | 9949             |

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EXAMINER

HANNETT, JAMES M

ART UNIT PAPER NUMBER

2612

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/484,667

Applicant(s)

SILVERSTEIN, D. AMNON

Examiner

James M. Hannett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 22-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 24-30, 33-37, 40, 42, 43 and 52 is/are allowed.
- 6) ☒ Claim(s) 22, 23, 31, 32, 38, 39, 41 and 44-51 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/6/2005 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to claims 22-52 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 38 and 39 recites the limitation "the device". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**1:** Claims 22 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN

6,597,817 Silverbrook.

**2:** As for Claim 22, Silverbrook teaches on Column 2, Lines 66-67 And Column 3, Lines 1-30 and depicts in Figure 1 a process for a camera having a display, comprising: sensing motion corresponding to motion of the display ; interpreting the sensed motion as a user interface input; and presenting on the display images (2) superimposed on a scene (1) viewed through the camera in accordance with the interpreted user interface input (orientation of camera).

Silverbrook teaches capturing a scene using the CCD image sensor and using motion sensors to determine the orientation of the camera during image capture. Depending on the detected orientation during image capture, the camera will superimpose additional information in different locations within the image. This additional information can be date and location information.

The sensed orientation of the camera is viewed by the examiner as a user interface input.

**3:** In regards to Claim 31, Silverbrook teaches on Column 2, Lines 66-67 And Column 3, Lines 1-30 and depicts in Figure 1 a process for a camera having a display, comprising: sensing motion corresponding to motion of the display ; interpreting the sensed motion as a user interface input; and presenting on the display images (2) superimposed on a scene (1) viewed through the camera in accordance with the interpreted user interface input (orientation of camera).

Silverbrook teaches capturing a scene using the CCD image sensor and using motion sensors to determine the orientation of the camera during image capture. Depending on the detected

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orientation during image capture, the camera will superimpose additional information in different locations within the image. This additional information can be date and location information.

The sensed orientation of the camera is viewed by the examiner as a user interface input.

**4:** Claim 41, 44, 45, 46, 47, 48, 49 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0109782 Ejima et al.

5: As for Claim 41, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion of the camera (motion sensors); interpreting sensed motion of the camera as a user interface input; presenting images on the display (6) in accordance with the interpreted user interface input; and repositioning the images presented on the display (6) in response to sensed motion of the camera such that the presented images appear fixed with respect to a coordinate system external to the camera.

6: In regards to Claim 44, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface input (sensed motion), wherein the virtual panorama is comprised of multiple imaged captured by the camera. The examiner views the virtual panorama as the entire image including regions not currently displayed on the display (6). The examiner views an image of “the images captured by the camera” as being the image currently being displayed in the display (6).

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7: As for Claim 45, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface input (sensed motion), wherein the virtual panorama is comprised of multiple images captured by the camera. The examiner views the virtual panorama as the entire image including regions not currently displayed on the display (6). The examiner views an image of “the images captured by the camera” as being the image currently being displayed in the display (6).

8: In regards to Claim 46, Ejima et al teaches on Paragraph [0191] and depicts in Figure 19 selecting the scene portion (zoomed region) comprises designating boundaries of a region of the scene. The examiner views the process of moving the camera in a direction parallel to the optical axis to zoom the picture in/out as the process of designating boundaries of a region of the scene.

9: As for Claim 47, It is inherent that the processing circuitry stores the detected motion information in order to perform the processing required to zoom into or out of the currently displayed image.

10: In regards to Claim 48, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different

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portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface input (sensed motion), wherein the virtual panorama is comprised of multiple imaged captured by the camera. The examiner views the virtual panorama as the entire image including regions not currently displayed on the display (6). The examiner views an image of “the images captured by the camera” as being the image currently being displayed in the display (6). Ejima et al teaches on Paragraph [0191] and depicts in Figure 19 selecting the scene portion (zoomed region). This process of changing the displayed image to an image corresponding to the selected region is viewed by the examiner as modifying a captured image (displayed image) in response to the interpreted user interface input (zoom command).

11: As for Claim 49, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface input (sensed motion), wherein the virtual panorama is comprised of multiple imaged captured by the camera. The examiner views the virtual panorama as the entire image including regions not currently displayed on the display (6). The examiner views an image of “the images captured by the camera” as being the image currently being displayed in the display (6). Ejima et al teaches on Paragraph [0191] and depicts in Figure 19 selecting the scene portion (zoomed region). This process of changing the displayed image to an image corresponding to the selected region is viewed by the examiner as modifying a captured image (displayed image) in response

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to the interpreted user interface input (zoom command). Zooming into an image constitutes cropping of the previously displayed image.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**12:** Claims 23, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,597,817 Silverbrook in view of US 2002/0109782 Ejima et al.

**13:** As for Claim 23, Silverbrook teaches the use of a camera which can detect the orientation of the camera and adjust the position of superimposed icon information accordingly based on the orientation of the camera. However, Silverbrook does not teach determining a viewpoint for displaying a region of a given image on the display based on the sensed motion of the camera.

Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 the use of a camera that uses motion sensors to detect motion of the camera. Ejima et al teaches that it is advantageous to allow a camera to change the portion of a displayed image based on a detected movement by the motion sensors. This method is advantageous because it allows a user to scroll through the image without the need to use a finger to operate a scroll key therefore improving ease of use of the camera.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the camera of Silverbrook to determine a viewpoint for displaying a region of a given image on the display based on the sensed motion of the camera as taught by



Ejima et al in order to allow a user to scroll through the image without the need to use a finger to operate a scroll key therefore improving ease of use of the camera.

14: In regards to Claim 32, Silverbrook teaches the use of a camera which can detect the orientation of the camera and adjust the position of superimposed icon information accordingly based on the orientation of the camera. However, Silverbrook does not teach determining a viewpoint for displaying a region of a given image on the display based on the sensed motion of the camera.

Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 the use of a camera that uses motion sensors to detect motion of the camera. Ejima et al teaches that it is advantageous to allow a camera to change the portion of a displayed image based on a detected movement by the motion sensors. This method is advantageous because it allows a user to scroll through the image without the need to use a finger to operate a scroll key therefore improving ease of use of the camera.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the camera of Silverbrook to determine a viewpoint for displaying a region of a given image on the display based on the sensed motion of the camera as taught by Ejima et al in order to allow a user to scroll through the image without the need to use a finger to operate a scroll key therefore improving ease of use of the camera.

**15:** Claims 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0109782 Ejima et al.

16: In regards to Claim 50, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion

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corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface input (sensed motion), wherein the virtual panorama is comprised of multiple imaged captured by the camera. The examiner views the virtual panorama as the entire image including regions not currently displayed on the display (6). The examiner views an image of “the images captured by the camera” as being the image currently being displayed in the display (6). However, Ejima et al does not teach the method of modifying the captured image by changing color parameters associated with the captured image.

Official notice is taken that it was well know in the art at the time the invention was made to enable a user to change the color parameters of a captured image in order to improve the image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Ejima et al with a color processing command that allows a user to correct the color intensities of an image and therefore improve image quality.

17: As for Claim 51, Ejima et al teaches in the abstract and on Paragraph [0142-0155] and depicts in Figure 10 a process for a camera having a display (6), comprising: sensing motion corresponding to motion of the display (6); Paragraph [0165]; interpreting the sensed motion as a user interface input; and presenting images on the display (6) in accordance with the interpreted user interface input (Paragraph [0152]), wherein presenting comprises presenting different portions of a virtual panoramic in the display (6) in accordance with the interpreted user interface

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input (sensed motion). However, Ejima et al does not teach the method of automatically recording time of day and geographic location data with each picture captured by the camera.

Official notice is taken that it was well known in the art at the time the invention was made to allow users of digital cameras to record recording time of day and geographic location data with each picture they capture on digital cameras in order to allow the users to remember in the distant future when and where the pictures were taken.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of recording time of day and geographic location data with each picture in the camera of Ejima et al in order to allow the users to remember in the distant future when and where the pictures were taken.

***Allowable Subject Matter***

**18:** Claims 1-10, 24-30, 33-37, 40, 42, 43 and 52 are allowed.

19: Claims 38 and 39 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett  
Examiner  
Art Unit 2612

JMH  
October 11, 2005



NGOC-YEN VU  
PRIMARY EXAMINER